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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. <span style="float: right;">DS</span>
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EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/813,200

Applicant(s)

Hirano

Examiner

Mike Dietrich

Group Art Unit

2814



X Responsive to communication(s) filed on Feb 22, 2000

X This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

X Claim(s) 10, 11, 16, and 18 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

X Claim(s) 10, 11, 16, and 18 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some\* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

X Notice of References Cited, PTO-892

X Information Disclosure Statement(s), PTO-1449, Paper No(s). 11

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Final Rejection*

The final rejection of office action 10, 10/20/99, is withdrawn and the shortened statutory time is from the date of office action 16.

### *Claim Objections*

1. Claim 18 is objected to because of the following informalities: Claim 18 recites "for partitioning sid load lock chamber." examiner suggests replacing sid with - -said - -. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites "a local exhaust, connected with said first vacuum exhaust line and not connected with said load lock chamber, for locally exhausting a dust generating portion of said moving mechanism." It is unclear what else the local exhaust is connected to beside the first vacuum exhaust line.

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*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10, 11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by "JP 06-002676".

"JP 06-002676" discloses a load lock chamber 10 and a gas supply line 1 for supplying gas to the load lock chamber 10. A chamber exhaust for exhausting the load lock chamber 10 comprises an atmospheric pressure vent line 7 and a vacuum exhaust line 3 connected to a vacuum pump (not shown). A moving mechanism 11 is used to move a substrate inside the load lock chamber 10. A local exhaust 14 exhausts the dust generating portion of the moving mechanism 11. Flow rate regulators 2/16 are provided in the gas supply line 1 and local exhaust 14. A first valve 5 is disposed at an intermediate portion of the vacuum exhaust line 3. A second valve 8 is disposed at an intermediate portion of the atmospheric pressure vent line 7. A pressure detector 4 is shown to detect the pressure in the load lock chamber 10. First 5 and second 8 valves are controlled by a controller so that during the movement of the substrate the first valve 5 is closed and the second valve 8 is open.

In regards to claim 11, During the movement of the substrate the gas supply is controlled by the flow regulator 2 to be greater than the exhaust amount from the local exhaust 14 and

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chamber exhaust, so that the pressure in the load lock chamber is greater than the atmospheric pressure.

In regards to claim 16, "JP 06-002676" discloses a load lock chamber 10 and a gas supply line 1 for supplying gas to the load lock chamber 10. A chamber exhaust for exhausting the load lock chamber 10. A moving mechanism 11 is used to move a substrate inside the load lock chamber 10. A first vacuum exhaust line 6 is connected to a vacuum pump (not shown). A second exhaust line 14 is connected to the chamber 10 and first exhaust line 6. A third exhaust line 3 is connected to the load lock chamber 10 and the first vacuum line 6. A local exhaust 7, exhaust dust generating portion of the moving mechanism 11. A first valve 8 is disposed at an intermediate portion of the vacuum exhaust line 7. A second valve 5 is disposed at an intermediate portion of the third vacuum exhaust line 3. First 8 and second 5 valves are controlled by a controller so that during 11 the movement of the substrate the second valve 5 is closed.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over "JP 06-002676" in view of Suzuki.

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"JP 06-002676" as described above, fails to disclose a partition plate that partitions the load lock chamber into a first region containing the substrate and a second region containing the moving mechanism. However, Suzuki et al discloses partition plate 60 for partitioning load lock chamber into a first region A containing the substrate and a second region B containing the moving mechanism T. Holes 62 are formed in the partitioning plate 60 to allow the flow of gas from first region A into second region B, thereby providing contamination from dust generated by moving mechanism T. Therefore, it would have been obvious to one of ordinary skill in the art to use a partitioning plate with "JP 06-002676", since a partition plate would have further reduced the chance of contamination of the substrate from dust created by the moving mechanism, as shown by Suzuki.

Examiner would appreciate a full translation of JP-06002676 to help further the prosecution of the application, if Applicant could provide a copy.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mike Dietrich** at **(703) 305-0381** and between the hours of 8:00 AM to 4:00PM (Eastern Standard Time) Monday through Friday or by E-mail via


**Michael.Dietrich@uspto.gov**. The Art Unit 2814 Fax Center number is **(703) 308-7722; -7724**.

Primary Examiner **Don Monin** can be reached at **(703) 308-4895**. Any inquiry of a general nature or relating to the status of this application should be directed to the **Group 2800**

**Receptionist at (703) 308-0956.**

Patent Examiner

Michael Dietrich

  
Donald L. Monin, Jr.  
Primary Examiner